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APPLICATION NO). F	ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/054,828	<u> </u>	01/23/2002	Philipp Jung	02894-532001	7798	
26161	7590	04/09/2003				
FISH & R	RICHARD	SON PC	EXAMINER			
225 FRAN BOSTON,	IKLIN ST MA 0211	0		DUDA, RINA I		
			ww.	ART UNIT	PAPER NUMBER	
				2837	in	
				DATE MAILED: 04/09/2003		

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)	
	Application No.		
2 2 2	10/054,828	JUNG ET AL.	
Office Action Summary	Examiner	Art Unit	
	Rina I Duda	2837	Idross -
The MAILING DATE of this communication ap Period for Reply			Juress
A SHORTENED STATUTORY PERIOD FOR REP THE MAILING DATE OF THIS COMMUNICATION - Extensions of time may be available under the provisions of 37 CFR 1 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a re - If NO period for reply is specified above, the maximum statutory perio - Failure to reply within the set or extended period for reply will, by statu - Any reply received by the Office later than three months after the mail earned patent term adjustment. See 37 CFR 1.704(b). Status	l. 136(a). In no event, howe pply within the statutory min d will apply and will expire:	ever, may a reply be timely filed imum of thirty (30) days will be considered time SIX (6) MONTHS from the mailing date of this of become ABANDONED (35 U.S.C. § 133).	ely. communication.
1) \boxtimes Responsive to communication(s) filed on <u>19</u>	<u>9 November 2002</u> .		
Zu/	This action is non-fi		
3) Since this application is in condition for allocated in accordance with the practice under	wance except for foer foer foer foer foer foer foer	ormal matters, prosecution as to t 1935 C.D. 11, 453 O.G. 213.	he merits is
Disposition of Claims			
4)⊠ Claim(s) <u>26-78</u> is/are pending in the applica		ation.	
4a) Of the above claim(s) is/are withd	rawn from consider	ation.	
5) Claim(s) is/are allowed.			
6)⊠ Claim(s) <u>32-35 and 63-70</u> is/are rejected.			
7)⊠ Claim(s) <u>26-31, 36-62 and 71-78</u> is/are obje			
8) Claim(s) are subject to restriction and	d/or election require	ement.	
Application Papers	205		
9) The specification is objected to by the Exami	ner.	tod to by the Examiner	
10) The drawing(s) filed on is/are: a) ⊠ ac	the drawing(s) he he	ald in abevance. See 37 CFR 1.85(a) .
Applicant may not request that any objection to 11) The proposed drawing correction filed on 19	Movember 2002 is:	a)⊠ approved b)□ disapprove	d by the Examiner.
If approved, corrected drawings are required in			,
12) The oath or declaration is objected to by the			
Priority under 35 U.S.C. §§ 119 and 120 13)	sian priority under 3	5 U S C & 119(a)-(d) or (f).	
	sign priority under e	0 0.0.0 3 1 10 (4) (4)	
a) ☐ All b) ☐ Some * c) ☐ None of: 1.☐ Certified copies of the priority docume	ents have been rec	eived ·	
2. Certified copies of the priority documents3. Copies of the certified copies of the priority documents			al Stage
application from the International * See the attached detailed Office action for a	Bureau (PCT Rule list of the certified o	copies not received.	
14) ☐ Acknowledgment is made of a claim for dome	estic priority under	35 U.S.C. § 119(e) (to a provision	nal application).
a) ☐ The translation of the foreign language 15)☐ Acknowledgment is made of a claim for dom	provisional applica	tion has been received.	
Attachment(s)			
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(4) 5) 5) 6) [Notice of Informal Patent Application (

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DETAILED ACTION

Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 32-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Buckley (US Patent 4739346, of record), Gruner et al (US Patent 5065341, of record), and Ueda et al (US patent 4965504, of record).

Claims 32, 33, Gruner et al teach a printer for a personal computer comprising a driving mechanism including an electric motor 1 and a control stage containing regulator 4 and amplifier 8 for controlling the supply of power to the motor (as described in column 13 lines 8-14), said control stage supplies the motor (during off periods) with an energy signal that causes the motor to act as an electroacoustic transducer emitting audible signals, as described in column 4 lines 48-53 and column 8 lines 17-22. Gruner et al fail to teach an analog signal being applied to the motor.

However, Buckley discloses a digital-to-analog converter connected to a digital output in order to convert said digital data into an analog signal with the characteristics of the input signal (such as the frequency), as shown in figure 6. Therefore, it would have been obvious to use a digital-to-analog converter to convert the output of the control stage of Gruner et al into an analog output signal, since some electric motors operate with voltages that vary continuously instead of voltage pulses.

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Although Gruner et al teach a control stage causing the motor to emit audible signals; they do not specify that those signals would be in the form of speed or music.

However, Ueda et al describes in column 6 lines 31-57 describe a way of making an electric motor produce audible speech or music.

Therefore, it would have obvious to use the method of making audible speech or music taught by Ueda et al in the motor control stage describe by Gruner et al in order to obtain a system capable of informing a user of possible malfunction in the system.

In reference to claim 34, Buckley discloses a stepping motor for driving a printer, as described in the abstract.

3. Claims 63-69 are rejected under 35 U.S.C. 103(a) as being unpatentable over Buckley (US Patent 4739346, of record) and Gruner et al (US Patent 5065341, of record).

Claims 63 and 65-68, Gruner et al teach a printer for a personal computer comprising a driving mechanism including an electric motor 1, which is enclosed by a housing and a control stage containing regulator 4 and amplifier 8 for controlling the supply of power to the motor (as described in column 13 lines 8-14), said control stage supplies the motor (during off periods) with an energy signal that causes the motor to act as an electroacoustic transducer emitting audible signals, as described in column 4 lines 48-53 and column 8 lines 17-22.

Claim 64, Buckley discloses a digital-to-analog converter connected to a digital output in order to convert said digital data into an analog signal with the characteristics of the input signal (such as the frequency), as shown in figure 6. Therefore, it would

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have been obvious to use a digital-to-analog converter to convert the output of the control stage of Gruner et al into an analog output signal, since some electric motors operate with voltages that vary continuously instead of voltage pulses.

Claim 69, Buckley discloses a stepping motor for driving a printer, as described in the abstract.

4. Claim 70 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gruner et al (US Patent 5065341) and Buckley (US Patent 4739346) as applied to claims 63-69 and further in view of McCarthy (US Patent 4042077)

Although the combined references above disclose a motor with a rotor having a braking reaction, they fail to teach a specific device capable of maintaining the motor in the rest position. However, McCarthy discloses a braking device 20 connected to the motor 24 for maintaining the motor in the rest position. Therefore, it would have been an obvious design choice to use the braking device of McCarthy in the system described by Gruner et al and Buckley, since the braking device can be adjusted to maintain a desired braking force.

5. Claim 35 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gruner et al (US Patent 5065341, of record), Buckley (US Patent 4739346, of record), and Ueda et al (US patent 4965504, of record) as applied to claims 32-34 above, and further in view of McCarthy (US Patent 4042077, of record)

Although the combined references above disclose a motor with a rotor having a braking reaction, they fail to teach a specific device capable of maintaining the motor in the rest position. However, McCarthy discloses a braking device 20 connected to the

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motor 24 for maintaining the motor in the rest position. Therefore, it would have been an obvious design choice to use the braking device of McCarthy in the system described by Gruner et al, Buckley, and Ueda et al since the braking device can be adjusted to maintain a desired braking force.

Allowable Subject Matter

- 6. The following is a statement of reasons for the indication of allowable subject matter: Claims 26-31, 36-62 and 71-78 are found allowable because they recite limitations which as described in the previous office action dated 7/17/02 were not taught by the prior art.
- 7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rina I Duda whose telephone number is 703-305-0722.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Nappi can be reached at 703-308-3370. The fax phone number for the organization where this application or proceeding is assigned is 703-308-7722 for regular communications and for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

Rina I Duda Examiner Art Unit 2837